LARGE QUANTITY GENERATOR INSPECTION: BB AIR EMISSION STANDARDS

Section T: Air Emission Standards BB

B. BB: Pumps in Light Liquid Service

T.008: Each pump in light liquid service is monitored monthly to detect leaks by the methods specified in s. NR 665.1063(2). The following pumps are not subject to this requirement: 1. A pump that is equipped with a dual mechanical seal system that includes a barrier fluid system and meets all of the following: a. has a dual mechanical seal system is one of the following: i. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure ii. Is equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with s. NR 665.1060. iii. Is equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere. b. The barrier fluid system may not be a hazardous waste with organic concentrations 10 percent or greater by weight. c. Equip each barrier fluid system with a sensor that will detect failure of the seal system, the barrier fluid system or both. d. Check each pump by visual inspection, each calendar week, for indications of liquids dripping from the pump seals. e. Check each sensor described in item 1.c daily, or equip it with an audible alarm and check the alarm monthly to ensure it is functioning properly. f. Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system or both. g. If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system or both based on the criterion determined in item 1. f. a leak is detected. h. When a leak is detected, repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in s. NR 665.1059. i. Make a first attempt at repair (e.g., relapping the seal) no later than 5 calendar days after each leak is detected. 2. A sealless pump that is designated, as described in s. NR 665.1064(7)(b), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and meets all of the following is also exempted from s. NR 665.1052(3)and (4). a. It has no externally actuated shaft penetrating the pump housing. b. It operates with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background measured by the methods specified in s. NR 665.1063 (3). c. It is tested for compliance with item 2.b initially upon designation, annually and at other times requested by the department.		665.1052(1)(a)
T.009: Each pump in light liquid service is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.		665.1052(1)(b)
T.010: When a leak is detected from a pump, the first attempt at repair (e.g., tightening the packing gland) was made no later than 5 calendar days after each leak is detected. A leak is one of the following: 1. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected (s. NR 665.1052(2)(a)). 2. There are indications of liquids dripping from the pump seal, a leak is detected (s. NR 665.1052(2)(b)). Pumps that are operate in compliance with item T.08.2 (s. NR 665.1052(5)) are not subject to this requirement.		665.1052(3)(b)
T.011: When a leak is detected from a pump, the pump is repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in s. NR 665.1059. A leak is described in item T.10. Pumps that are operate in compliance with item T.08:2 (s. NR 665.1052(5)) are not subject to this requirement.		665.1052(3)(a)

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B. BB: Pumps in Light Liquid Service

T.012: If no compressors or the compressor meets the following, then go to T:21. 1. The compressor is designated (as described in s. NR 665.1064(7)(b)) for no detectable emission as indicated by an instrument reading of less than 500 ppm above background and the compressor meets all of the following requirements: a. is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, measured by the method specified in s. NR 665.1063 (3). b. is tested for compliance with item 2.a initially upon designation, annually, and at other times requested by the department.		NA1
T:007 If no pumps in light liquid service (or the pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with s. NR 665.1060), then go to T:12. Light liquid service means that the piece of equipment contains or contacts a waste stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20?C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 kilopascals (kPa) at 20?C is equal to or greater than 20% by weight and the fluid is a liquid at operating conditions (s. NR 664.1031(21)). To determine if pumps are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D2879?86, incorporated by reference in s. NR 660.11 (s. NR 665.1063(8).		NA1

C. BB: Compressors

T.013: Each compressor is equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere. A compressor that is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device is exempt from this requirement.		665.1053(1)
T.014 The compressor seal system required in item T.13 is one of the following: 1. Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure. 2. Equipped with a barrier fluid system that is connected by a closed?vent system to a control device that complies with s. NR 665.1060. 3. Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to atmosphere.		665.1053(2)
T.015: The barrier fluid described in items T.13 and T.14 are not a hazardous waste with organic concentrations 10 percent or greater by weight.		665.1053(3)
T.016: Each barrier fluid system described in items T.13 to T.15 is equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.		665.1053(4)
T.017: Each sensor required in item T.16 is checked daily, or equipped with an audible alarm and that alarm is checked monthly to ensure it is functioning properly, unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor is checked daily.		665.1053(5)(a)
T.018: The generator determined, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.		665.1053(5)(b)
T.019: When a leak is detected from a compressor, the first attempt at repair (e.g., tightening the packing gland) was made no later than 5 calendar days after each leak is detected. A leak is when the sensor in item T.18 indicates failure of the seal system, the barrier fluid system, or both.		665.1053(7)(b)

Section T: Air Emission Standards BB

C. BB: Compressors

T.020: When a leak is detected from a compressor, the compressors repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in s. NR 665.1059. A leak is when the sensor in item T.18 indicates failure of the seal system, the barrier fluid system, or both.		665.1053(7)(a)

D. BB: Pressure relief devices in gas or vapor service

T.021: If no pressure relief devices in gas or vapor service (or the pressure relief device in gas or vapor service is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device described in s. NR 665.1060), then go to T.25.		NA1
T.022: Except during pressure releases, each pressure relief device in gas or vapor service is operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background when measured by the method specified in s. NR 665.1063(3).		665.1054(1)
T.023: After each pressure release, the pressure relief device is returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in s. NR 665.1059.		665.1054(2)(a)
T.024: No later than 5 calendar days after the pressure release, the pressure relief device is monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, measured by the method specified in s. NR 665.1063(3).		665.1054(2)(b)

E. BB: Sampling connection systems

T.025: If no sampling connectors, or the sampling connector is an in-situ sampling system, or is a sampling systems without purges, then go to T:28.		NA1
T.026: Each sampling connection system is equipped with a closed-purge, closed-loop, or closed-vent system.		665.1055(1)
T.027: The system collects the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.		665.1055(1)
T.028: Each closed-purge, closed-loop, or closed-vent system required in item T.26 meets one of the following requirements: 1. It returns the purged process fluid directly to the process line. 2. It collects and recycles the purged process fluid. 3. It is designed and operated to capture and transport all the purged process fluid to a waste management unit that complies with the applicable requirements of ss. NR 665.1085 to 665.1087 or a control device that complies with s. NR 665.1060.		665.1055(2)

F. BB: Open-ended valves or lines

T.029: If no open-ended valves or lines, then go to T:34.		NA1
T.030: Each open-ended valve or line is equipped with a cap, blind flange, plug or a second valve.		665.1056(1)(a)
T.031: The cap, blind flange, plug, or second valve seals the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.		665.1056(1)(b)
T.032: Each open-ended valve or line equipped with a second valve is operated in a manner such that the valve on the hazardous waste stream end is closed before the second valve is closed.		665.1056(2)

Section T: Air Emission Standards BB

F. BB: Open-ended valves or lines

T.033: When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but must comply with item T.30 at all other times.		665.1056(3)

G. BB: Valves in gas or vapor service or in light liquid service

T.034: If no valves in gas or vapor service or in light liquid service (or the valves in gas or vapor service or in light liquid service are being subject to the alternative standards in s. NR 665.1061 or 665.1062), then go to T.38. To determine if valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D2879?86, incorporated by reference in s. NR 660.11 (s. NR 665.1063(8).		NA1
T.035: Each valve in gas or vapor or light liquid service is monitored monthly to detect leaks by the methods specified in s. NR 665.1063(2). The following valves are not subject to this requirement: 1. Any valve that is designated, as described in s. NR 665.1064 (7)(b), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt when all of the following are meet: a. It has no external actuating mechanism in contact with the hazardous waste stream. b. It is operated with emissions less than 500 ppm above background determined by the method specified in s. NR 665.1063(3). c. It is tested for compliance with item 1.b. initially upon designation, annually, and at other times requested by the department. 2. Any valve that is designated, as described in s. NR 665.1064 (8)(a), as an unsafe-to-monitor valve is exempt when all of the following are meet: a. Determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger in comply with this requirement. b. Adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. 3. Any valve that is designated, as described in s. NR 665.1064 (8) (b), as a difficult-to-monitor valve is exempt when all of the following are meet: a. The generator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface. b. The hazardous waste management unit within which the valve is located was in operation before June 1, 1995. c. The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. Per s. NR 665.1057(3) any valve for which a leak is not detected for 2 successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, monitor the valve monthly until a leak is not detected for 2 successive months. Per s. NR 665.1057(2) a leak is defined as an instrument reading of 10,000 ppm or greater. 4. Alternative valve monitoring schedule: a. After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2%, a generator may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every 6 months). b. After 5 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2%, an owner or operator may begin to skip 3 of the quarterly leak detection periods (i.e., monitor for leaks once every year). c. If the percentage of valves leaking is greater than 2%, the generator must then return to monthly monitoring, but may return to alternative monitoring after s. NR 665.1057(3)(a) is met.		665.1057(1)
T.036: When a leak is detected from a valve, the valve repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in s. NR 665.1059. A leak is defined in item T.35.		665.1057(4)(a)

Section T: Air Emission Standards BB

G. BB: Valves in gas or vapor service or in light liquid service

T.037: When a leak is detected from a valve, the first attempt at repair was made no later than 5 calendar days after each leak is detected. A leak is defined in item T.35. First attempts at repair include, but are not limited to, the following best practices where practicable: 1. Tightening of bonnet bolts. 2. Replacement of bonnet bolts. 3. Tightening of packing gland nuts. 4. Injection of lubricant into lubricated packing.		665.1057(4)(b)

H. BB: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and

T.041: If no pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and flanges and other connectors, then go to T.45. Note that any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass or glass-lined) is not subject to this section (s. NR 665.1058(5)).		NA1
T.042: Monitor pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors within 5 days by the method specified in s. NR 665.1063(2) when evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. Per s. NR 665.1058(2) a leak is defined as an instrument reading of 10,000 ppm or greater.		665.1058(1)
T.043: When a leak is detected, repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in s. NR 665.1059. A leak is defined in item T.42.		665.1058(3)(a)
T.044: When a leak is detected, the first attempt at repair was made no later than 5 calendar days after each leak is detected. A leak is defined in item T.42. First attempts at repair include, but are not limited to, the following best practices where practicable: 1. Tightening of bonnet bolts. 2. Replacement of bonnet bolts. 3. Tightening of packing gland nuts. 4. Injection of lubricant into lubricated packing.		665.1058(3)(b)

I. BB: Delay of repair

T.045: If no delay or repair, then go to T.48 Delay of repair of equipment for which leaks have been detected is allowed when the: 1. repair is technically infeasible without a hazardous waste management unit shutdown. In such a case, repair the equipment before the end of the next hazardous waste management unit shutdown (s. NR 665.1059(1). 2. equipment that is isolated from the hazardous waste management unit and that does not continue to contain or contact hazardous waste with organic concentrations at least 10 percent by weight.		NA1
T.046: Delay of repair for valves meet all of the following: 1. The generator determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair. 2. When repair procedures are effected, collect and destroy or recover the purged material in a control device complying with s. NR 665.1060. Per s. NR 665.1059(5) delay of repair beyond a hazardous waste management unit shutdown is allowed for a valve if valve assembly replacement is necessary during the hazardous waste management unit shutdown, valve assembly supplies have been depleted and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Repair may not be delayed beyond the next hazardous waste management unit shutdown unless the next hazardous waste management unit shutdown occurs sooner than 6 months after the first hazardous waste management unit shutdown.		665.1059(3)

Section T: Air Emission Standards BB

I. BB: Delay of repair

T.047: Delay of repair for pumps met all of the following: 1. The repair requires use of a dual mechanical seal system that includes a barrier fluid system. 2. The repair is completed as soon as practicable, but not later than 6 months after the leak was detected.		665.1059(4)

J. BB: Control devices

T.048: If no control device, then go to T.105. ?Control device? means an enclosed combustion device, vapor recovery system or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse or sale (e.g., a primary condenser on a solvent recovery unit) is not a control device (s. NR 664.1031(7)).		NA1
T.049: The control device involving vapor recovery (e.g., a condenser or adsorber) is designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of s. NR 665.1032 (1)(a) for all affected process vents can be attained at an efficiency less than 95 weight percent.		665.1033(2)
T.050: The enclosed combustion device (e.g., a vapor incinerator, boiler ,or process heater) is designed and operated to reduce the organic emissions vented to it by 95% by weight by one of the following: a. Total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 % oxygen. b. Providing a minimum residence time of 0.50 seconds at a minimum temperature of 760 ?C.		665.1033(3)
T.051: If a boiler or process heater is used as the control device, the vent stream is introduced into the flame combustion zone of the boiler or process heater.		665.1033(3)
T.052: A flare that is steam-assisted, air-assisted, or non-assisted is used as the control device. If no go to T.065.		NA1
T.053: The flare is designed for and operated with no visible emissions as determined by the methods specified in sub. (5) (a), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.		665.1033(4)(a)
T.054: The flare is operated with a flame present at all times as determined by a heat sensing monitoring device.		665.1033(4)(b)
T.055: The continuous recorder for the flare indicates the continuous ignition of the pilot flame.		665.1033(4)(b)
T.055: A steam-assisted flare or an air-assisted flare has a net heating value of the vent stream routed to the flare >=11.2 MJ/scm (300 Btu/scf).		665.1033(4)(c)
T.056: The flare's monitoring equipment is installed, calibrated, maintained, and operated according to the manufacturer's specifications.		665.1033(6)(b)
T.056: A nonassisted flare has a net heating value of the vent stream routed to the flare$7.45 MJ/scm (200Btu/scf).		665.1033(4)(c)
T.057: The net heating value of the vent stream determined by the equation contained in s. NR 264.1033(5)(b).		665.1033(5)(b)
T.058: For steam-assisted flares or nonassisted flares that are designed and operated with an exit velocity of less than 18.3 m/s (60 ft/s), the exit velocity was determined by Method 2, 2A,2C, or 2D found in 40 CFR part 60.		665.1033(4)(d)1.

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J. BB: Control devices

T.059: For steam-assisted flares or nonassisted flares that are designed and operated with an exit velocity of >=18.3 m/s but < 122 m/s, the heating value of the vent stream > 37.3 MJ/scm (1,000 Btu/scf).		665.1033(4)(d)2.
T.060: For steam-assisted flares or nonassisted flares that are designed and operated with an exit velocity of >=18.3 m/s (60 ft/s) but < 122 m/s (400 ft/s), the exit velocity was determined by Method 2, 2A,2C, or 2D found in 40 CFR part 60.		665.1033(4)(d)2.
T.061: For steam-assisted flares that are designed and operated with an exit velocity <122 m/s (400 ft/s) the heat value of the vent stream >=11.2 MJ/scm (300 Btu/scf).		665.1033(4)(d)3.
T.062: For nonassisted flares that are designed and operated with an exit velocity <122 m/s (400 ft/s) the heat value of the vent stream >= 7.45 MJ/scm (200 Btu/scf).		665.1033(4)(d)3.
T.063: For steam-assisted flares and nonassisted flares that are designed and operated with an exit velocity <122 m/s (400 ft/s) the exit velocity was determined by Method 2, 2A,2C, or 2D found in 40 CFR part 60.		665.1033(4)(d)3.
T.064: An air assisted flare that is design and operated with an exit velocity less than the velocity, Vmax, is determined by method listed in s. NR 665.1033(5)(e).		665.1033(4)(e)
T.065: A thermal vapor incinerator is used as the control device. If no go to T.070.		NA1
T.066: The thermal vapor incinerator's monitoring equipment is installed, calibrated, maintained, and operated according to the manufacturer's specifications.		656.1033(6)(b)
T.067: The temperature monitoring device is installed in the combustion chamber downstream of the combustion zone.		665.1033(6)(b)1.
T.068: The temperature monitoring device has an accuracy of ?1 percent of the temperature being monitored in ?C or ?0.5 ?C, whichever is greater.		665.1033(6)(b)1.
T.069: The temperature monitoring device is equipped with a continuous recorder.		665.1033(6)(b)1.
T.070: A catalytic vapor incinerator is used as the control device. If no go to T.076.		NA1
T.071: The catalytic vapor incinerator's monitoring equipment is installed, calibrated, maintained, and operated according to the manufacturer's specifications.		665.1033(6)(b)
T.072: One temperature sensor is installed in the vent stream at the nearest feasible point to the catalyst bed inlet.		665.1033(6)(b)2.
T.073: The other temperature sensor is installed in the vent stream at the nearest feasible point to the catalyst bed outlet.		665.1033(6)(b)2.
T.074: The temperature monitoring device has an accuracy of ?1 percent of the temperature being monitored in ?C or ?0.5 ?C, whichever is greater.		665.1033(6)(b)2.
T.075: The temperature monitoring device is equipped with a continuous recorder that is capable of monitoring temperature at the two locations.		665.1033(6)(b)2.

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J. BB: Control devices

T.076: Boiler or process heater having a design heat input capacity <44 MW. If no go to T.081.		NA1
T.077: The boiler or process heater's monitoring equipment is installed, calibrated, maintained, and operated according to the manufacturer's specifications.		665.1033(6)(b)
T.078: The temperature monitoring device is installed at a location in the furnace downstream of the combustion zone.		665.1033(6)(b)4.
T.079: The temperature monitoring device has an accuracy of ?1 percent of the temperature being monitored in ?C or ?0.5 ?C, whichever is greater.		665.1033(6)(b)4.
T.080: The temperature monitoring device is equipped with a continuous recorder.		665.1033(6)(b)4.
T.081: Boiler or process heater having a design heat input capacity >= 44 MW. If no go to T.085.		NA1
T.082: The boiler or process heater's monitoring equipment is installed, calibrated, maintained, and operated according to the manufacturer's specifications.		665.1033(6)(b)
T.083: A monitoring device equipped that measures parameter(s) that indicates good combustion operating practices are being used.		665.1033(6)(b)5.
T.084: The monitoring device is equipped with a continuous recorder.		665.1033(6)(b)5.
T.085: A condenser unit. If no go to T.092.		NA1
T.086: The condenser's monitoring equipment is installed, calibrated, maintained, and operated according to the manufacturer's specifications.		665.1033(6)(b)
T.087: A monitoring device that measures the concentration level of the organic compounds in the exhaust vent stream from the condenser.		665.1033(6)(b)6.a.
T.088: The monitoring device is equipped with a continuous recorder that measures the concentration level of the organic compounds in the exhaust vent stream from the condenser.		665.1033(6)(b)6.a.
T.089: The temperature monitoring device is installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).		665.1033(6)(b)6.b.
T.090: The temperature monitoring device has an accuracy of ?1 percent of the temperature being monitored in ?C or ?0.5 ?C, whichever is greater.		665.1033(6)(b)6.b.
T.091: The condenser involved in vapor recovery is designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of s. NR 665.1032 (1)(a) for all affected process vents can be attained at an efficiency less than 95 weight percent.		665.1033(1)(a)

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J. BB: Control devices

T.092: For a carbon adsorption system such as a fixed?bed carbon adsorber that regenerates the carbon bed directly in the control device. If no go to T.103.		NA1
T.093: The carbon adsorber-regenerative system's monitoring equipment is installed, calibrated, maintained, and operated according to the manufacturer's specifications.		665.1033(6)(b)
T.094: Is equipped with a monitoring device that measures the concentration level of the organic compounds in the exhaust vent stream from the carbon bed.		665.1033(6)(b)7.a.
T.095: The monitoring device is equipped with a continuous recorder that measures the concentration level of the organic compounds in the exhaust vent stream from the carbon bed.		665.1033(6)(b)7.a.
T.096: Is equipped with a monitoring device that indicates the carbon bed is regenerated on a regular, predetermined time cycle.		665.1033(6)(b)7.b.
T.097: The monitoring device is equipped with a continuous recorder that indicates the carbon bed is regenerated on a regular, predetermined time cycle.		665.1033(6)(b)7.b.
T.098: The generator inspects at least once each operating day the readings from each monitoring device required T.095 and T.097 to determine if the control device is operational.		665.1033(6)(b)7.c.
T.099: The generator, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with s. NR 665.1033.		665.1033(6)(b)7.c.
T.100: The carbon adsorption involved in vapor recovery is designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of s. NR 665.1032 (1)(a) for all affected process vents can be attained at an efficiency less than 95 weight percent.		665.1033(6)(b)
T.101: The generator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly on-site in the control device, replaced the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of s. NR 665.1035(2)(d)3.f. The carbon's service life is established by the design analysis that considers the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis also establishes the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling or drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time and design service life of carbon (s. NR 665.1035(2)(d)3.f.).		665.1033(7)

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J. BB: Control devices

T.102: The generator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly on-site in the control device must replace the existing carbon in the control device with fresh carbon on a regular basis using one of the following: 1. Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of s. NR 665.1035(2)(d)3.g., whichever is longer. 2. Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of s. NR 665.1035(2)(d)3.g. The design analysis per s. NR 665.1035(2)(d)3.g must consider the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis must also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.		665.1033(8)
T.103: Others. In no go to T.105.		NA1
T.104: The generator seeking to comply with s. NR 6665.1033 by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system developed documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.		665.1033(9)

K. BB: Closed-vent systems and control devices

T.105: If no close-vent system, then go to T. ?Closed?vent system? means a system that is not open to the atmosphere and that is composed of piping, connections and, if necessary, flow?inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device. (s. NR 664.1031(3)).		NA1
T.106: A closed-vent system that is operating at a pressure above atmospheric pressure is designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background determined by the procedure (Method 21) in s. NR 665.1034(2), and by visual inspections.		665.1033(10)(a)
T.107: A closed?vent system operating at a pressure below atmospheric pressure is equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.		665.1033(10)(b)
T.108: Operates closed-vent systems and control devices used to comply with s. NR 665.1033 at all times when emissions may be vented to them.		NA1
T.109: A closed-vent system that is operating at a pressure above atmospheric pressure. If no then go to T.119.		NA1
T.110: The generator of a closed-vent system that is operating at a pressure above atmospheric pressure conducted an initial leak detection monitoring of the closed-vent system on or before the date that the system becomes subject to s. NR 665.1033. Monitor the closed-vent system components and connections using the procedures in s. NR 665.1034 (2) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.		665.1033(11)(a)1.

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K. BB: Closed-vent systems and control devices

T.111: The generator conducted the initial leak detection using the procedures (Method 21) in s. NR 665.1034(2) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.		665.1033(11)(a)1.
T.112: After the initial leak detection monitoring, the generator visually inspect the closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between 2 sections of hard piping or a bolted and gasketed ducting flange) at least once per year to check for defects that could result in air pollutant emissions. Monitor a component or connection using the procedures in s. NR 665.1034 (2) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).		665.1033(11)(a)2.a
T.113: After the initial leak detection monitoring, any time a component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted), the generator monitor the component or connection using the procedures (Method 21) in s. NR 665.1034 (2) to demonstrate that it operates with no detectable emissions.		665.1033(11)(a)2.a
T.114: After the initial leak detection monitoring, the generator monitored the closed-vent system components or connections (other than those specified in item T.112 and T.113) annually and at other times requested by the department using the procedures (Method 21) in s. NR 665.1034 (2) to demonstrate that the components or connections operate with no detectable emissions. The following components or connections are not subject to this requirement. 1. Any components of a closed-vent system that are designated as unsafe to monitor are exempt when the generator does all of the following: a. Determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with this requirement. (b) Adheres to a written plan that requires monitoring the closed-vent system components using the procedure in this requirement as frequently as practicable during safe-to-monitor times. The generator designating any components of a closed-vent system as unsafe to monitor must record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor, an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.		665.1033(11)(a)2.b
T.115: Maintain a record of the inspection and monitoring according to s. NR 665.1035.		665.1033(11)(a)4.
T.116: The generator control detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, as soon as practicable, but not later than 15 calendar days after the emission is detected. Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the generator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Complete repair of the equipment by the end of the next process unit shutdown.		665.1033(11)(c)1.
T.117: The generator control detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background made the first attempt at repair no later than 5 calendar days after the emission is detected.		665.1033(11)(c)2.
T.118: Maintain a record of the defect repair according to s. NR 665.1035.		665.1033(11)(c)4.

Section T: Air Emission Standards BB

K. BB: Closed-vent systems and control devices

T.119: A closed-vent system that is operating at a pressure below atmospheric pressure. If no then go to T.126.		NA1
T.120: The generator conducted an initial inspection of the closed-vent system on or before the date that the system becomes subject to s. NR 665.1033.		665.1033(11)(b)2.
T.121: The generator conducts an inspection at least once every year.		665.1033(11)(b)2.
T.122: The generator visually inspected the closed-vent system to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes or gaps in ductwork or piping or loose connections.		665.1033(11)(b)1.
T.123: The generator control detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, as soon as practicable, but not later than 15 calendar days after the emission is detected. Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the generator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Complete repair of the equipment by the end of the next process unit shutdown.		665.1033(11)(c)1.
T.124: The generator control detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background made the first attempt at repair no later than 5 calendar days after the emission is detected.		665.1033(11)(c)2.
T.125: Maintain a record of the defect repair according to s. NR 665.1035.		665.1033(11)(c)4.
T.126: Carbon adsorption system to control air pollutant emissions. If no go to T.130.		NA1
T.127: Carbon that is a hazardous waste and is removed from the control device and is regenerated or reactivated in an on-site thermal treatment, the on-site thermal treatment meets one of the following: 1. The generator of the unit has been issued an operating license under ch. NR 670 which implements the requirements of subch. X of ch. NR 664. 2. The unit is equipped with and operating air emission controls according to the applicable requirements of this subchapter and subch. CC or subch. AA of ch. NR 664 and subch. CC of ch. NR 664. 3. The unit is equipped with and operating air emission controls according to a national emission standard for hazardous air pollutants under 40 CFR part 61 or 63, or corresponding provisions of subch. III of ch. NR 446 and chs. NR 447 to 469.		665.1033(13)(a)
T.128: Carbon that is a hazardous waste and is removed from the control device and is incinerated in an on-site hazardous waste incinerator, the on-site hazardous waste incinerator meets one of the following: 1. The generator has been issued an operating license under ch. NR 670 which implements the requirements of subch. O of ch. NR 664. 2. The generator has designed and operates the incinerator according to the interim license requirements of subch. O of ch. NR 664.		665.1033(13)(b)

Section T: Air Emission Standards BB

K. BB: Closed-vent systems and control devices

T.129: Carbon that is a hazardous waste and is removed from the control device and is burned in an on-site boiler or industrial furnace, the on-site boiler or industrial furnace meets one of the following: 1. The generator has been issued an operating license under ch. NR 670 which implements the requirements of subch. H of ch. NR 666. 2. The generator has designed and operates the boiler or industrial furnace according to the interim license requirements of subch. H of ch. NR 666.		665.1033(13)(c)

L. BB: Alternative standards for valves: 2% leak

T.130: Alternative standards for valves in gas or vapor service or in light liquid service: percentage of valves allowed to leak. If not applicable go to T.134. An generator subject to s. NR 665.1057 may elect to have all valves within a hazardous waste management unit comply with an alternative standard which allows no greater than 2 percent of the valves to leak.		NA1
T.131: A generator who decides to comply with the alternative standard of allowing 2 percent of valves to leak conducted the following performance test initially upon designation: 1. Monitor all valves subject to s. NR 665.1057, within the hazardous waste management unit, within one week by Method 21 as specified in s. NR 665.1063(2). 2. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. 3. Determine the leak percentage by dividing the number of valves subject to s. NR 665.1057 for which leaks are detected, by the total number of valves subject to s. NR 665.1057 within the hazardous waste management unit.		665.1061(2)(a)
T.132: If a valve leak is detected under item T.131, the first attempt of repair the valve leak was made within 5 calendar days after the leak was detected. First attempts at repair include, but are not limited to, the following best practices where practicable: 1. Tightening of bonnet bolts. 2. placement of bonnet bolts. 3. Tightening of packing gland nuts. 4. Injection of lubricant into lubricated packing.		665.1061(2)(b)
T.133: If a valve leak is detected under item T.131, the valve was repaired it as soon as practicable, but no later than 15 calendar days after the leak is detected except as provided in s. NR 665.1059 (delay of repair).		665.1061(2)(b)

M. BB: Test methods and procedures

T.134: Generators subject to this subchapter BB complied with the test methods and procedures requirements in this section.		NA1
T.135: Leak detection monitoring, as required in ss. NR 665.1052 to 665.1062, complied with all of the following requirements: 1. Monitoring complied with Method 21 in appendix A of 40 CFR part 60, incorporated by reference in s. NR 660.11. 2. The detection instrument meet the performance criteria of Method 21. 3. Calibrate the instrument before use on each day of its use by the procedures in Method 21. 4. Calibration gases were all of the following: a. Zero air (less than 10 ppm of hydrocarbon in air). b. A mixture of methane or n?hexane and air at a concentration of approximately, but less than, 10.000 ppm methane or n?hexane. 5. Traverse the instrument probe around all potential leak interfaces as close to the interface as possible as described in Method 21.		665.1063(2)

Section T: Air Emission Standards BB

M. BB: Test methods and procedures

T.136: When equipment is tested for compliance with no detectable emissions, as required in ss. NR 665.1052(5), 665.1053(9), 665.1054 and 665.1057(6), the test complied with all of the following requirements: 1. Complied with items T.135 1 to 4 (s. NR 665.1063(2)(a) to (d)). 2. Determine the background level, as set forth in Method 21. 3. Traverse the instrument probe around all potential leak interfaces as close to the interface as possible as described in Method 21. 4. Compare the arithmetic difference between the maximum concentration indicated by the instrument and the background level with 500 ppm for determining compliance.		665.1063(3)
T.137: Samples used in determining the percent organic content were representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.		665.1063(7)
T.138: Performance tests to determine if a control device achieves 95 weight percent organic emission reduction complies with all of the following (s. NR 665.1034 (3) (a) to (d)) 1. Conduct performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices and reduce data according to all of the following methods and calculation procedures: a. Method 2 in appendix A of 40 CFR part 60, incorporated by reference in s. NR 660.11, for velocity and volumetric flow rate. b. Method 18 or Method 25A in Appendix A of 40 CFR part 60, incorporated by reference in s. NR 660.11, for organic content. If Method 25A is used, the organic HAP used as the calibration gas shall be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale. c. Each performance test shall consist of 3 separate runs; conduct each run for at least one hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, average the results of all runs. Compute the average on a time-weighted basis. d. Determine total organic mass flow rates by the equation in s. NR 665.1034(3)(a)4. e. Determine the annual total organic emission rate by the equation in s. NR 665.1034(3)(a)5. f. Determine total organic emissions from all affected process vents at the facility by summing the hourly total organic mass emission rates (Eh, determined in subd. 4.) and by summing the annual total organic mass emission rates (EA, determined in subd. 5.) for all affected process vents at the facility. 2. Record the process information as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown and malfunction may not constitute representative conditions for the purpose of a performance test. 3. For an affected facility, provide, or cause to be provided, all of the following performance testing facilities: a. Sampling ports adequate for the test methods specified in par. (a). b. A safe sampling platform or platforms. c. Safe access to the sampling platform or platforms. d. Utilities for sampling and testing equipment. 4. For the purpose of making compliance determinations, use the time-weighted average of the results of the 3 runs. In the event that a sample is accidentally lost or conditions occur in which one of the 3 runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other circumstances beyond the owner or operator's control, compliance may, upon the department's approval, be determined using the average of the results of the 2 other runs.		665.1063(8)

Section T: Air Emission Standards BB

N. BB: Recordkeeping

T.139: Recordkeeping requirements. A generator of more than one hazardous waste management unit subject to this subchapter may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.		NA1
T.140: The generator recorded all of the following information in the facility operating record for each piece of equipment subject to subchapter BB: 1. Equipment identification number and hazardous waste management unit identification. 2. Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan). 3. Type of equipment (e.g., a pump or pipeline valve). 4. Percent-by0weight total organics in the hazardous waste stream at the equipment. 5. Hazardous waste state at the equipment (e.g., gas or vapor or liquid). 6. Method of compliance with the standard (e.g., ?monthly leak detection and repair? or ?equipped with dual mechanical seals?).		665.1064(2)(a)
T.141: When a generator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, the performance test plan consist of a detailed engineering description of the closed-vent system and/or control device that includes all of the following (s. NR 665.1035(2)(c)). 1. Manufacturer's name and model number of control device. 2. Type of control device. 3. Dimensions of the control device. 4. Capacity. 5. Construction materials.		665.1064(2)(c)
T.143: When the generator detected a leak in a piece of equipment subject to BB, the generator did all of the following: 1. The label or marking attach to the leaking equipment meets all of the following: a. Is weatherproof and readily visible identification. b. Marked with the equipment identification number. c. For pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and flanges and other connectors, the date evidence of a potential leak was found by visual, audible, olfactory, or any other detection. d. The date the leak was detected. 2. The identification on equipment, except on a valve, may be removed after it has been repaired. 3. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in s. NR 665.1057 (3) and no leak has been detected during those 2 months. Leaks based on equipment type: 1. Pumps in light liquid service (NR 665.1052): An instrument reading of 10,000 ppm or greater or there are indications of liquids dripping from the pump seal. 2. Compressor(665.1053): The sensor indicates failure of the seal system, the barrier fluid system or both. 3. Valves in gas or vapor service or in light liquid service (665.1057): An instrument reading of 10,000 ppm or greater is measured. 4. Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and flanges and other connectors (665.1058): An instrument reading of 10,000 ppm or greater or found by visual, audible, olfactory or any other detection method.		665.1064(3)

Section T: Air Emission Standards BB

N. BB: Recordkeeping

T.144: When each leak is detected, the generator recorded all of the following information in an inspection log and keep it in the facility operating record: 1. The instrument and operator identification numbers and the equipment identification number. 2. For pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and flanges and other connectors, the date evidence of a potential leak was found by visual, audible, olfactory, or any other detection. 3. The date the leak was detected and the dates of each attempt to repair the leak. 4. Repair methods applied in each attempt to repair the leak. 5. ?Above 10,000? if the maximum instrument reading measured by the methods specified in Method 21 (s. NR 665.1063(2)) after each repair attempt is equal to or greater than 10,000 ppm. 6. ?Repair delayed? and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. 7. Documentation supporting the delay of repair contains the following: a. The generator determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair. b. When repair procedures are effected, collect and destroy or recover the purged material in a control device complying with closed-vent systems and control devices (s. NR 665.1060). 8. The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown. 9. The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days. 10. The date of successful repair of the leak.		665.1064(4)
T.145: Closed-vent System and Control Device Subject to NR 665.1060. If no go to T.155.		NA1
T.146: The generator records in the facility operating record a description and date of each modification that is made to the closed-vent system or control device design.		665.1064(5)

Section T: Air Emission Standards BB

N. BB: Recordkeeping

T.147: The generator records in the facility operating record the identification of the operating parameter, a description of the monitoring device, and a diagram of the monitoring sensor location(s) as follows: 1. Flow indicator. Records showing the flow indicator sensor is installed in the vent stream at the nearest feasible point to the control device inlet, but before being combined with other vent streams. 2. Thermal vapor incinerator. Records showing the temperature monitoring device is equipped with a continuous recorder, the device has an accuracy of ?1 percent of the temperature being monitored in ?C or ?0.5 ?C, whichever is greater, and the temperature sensor is installed at a location in the combustion chamber downstream of the combustion zone. 3. For a catalytic vapor incinerator. Records showing a temperature monitoring device is equipped with a continuous recorder, the device is capable of monitoring temperature at 2 locations and has an accuracy of ?1 percent of the temperature being monitored in ?C or ?0.5 ?C, whichever is greater, and one temperature sensor is installed in the vent stream at the nearest feasible point to the catalyst bed inlet and the other temperature sensor is in the vent stream at the nearest feasible point to the catalyst bed outlet. 4. Flare. Records showing the heat sensing monitoring device is equipped with a continuous recorder that indicates the continuous ignition of the pilot flame. 5. Boiler or process heater having a design heat input capacity less than 44 MW. Records showing a temperature monitoring device is equipped with a continuous recorder, the device has an accuracy of ?1 percent of the temperature being monitored in ?C or ?0.5 ?C, whichever is greater, and the temperature sensor is installed at a location in the furnace downstream of the combustion zone. 6. Boiler or process heater having a design heat input capacity greater than or equal to 44 MW. Records showing that the monitoring device is equipped with a continuous recorder that measures parameter(s) that indicates good combustion operating practices are used. 6. Condenser. Records that show any of the following: a. The monitoring device is equipped with a continuous recorder that measures the concentration level of the organic compounds in the exhaust vent stream from the condenser. b. The temperature monitoring device is equipped with a continuous recorder, the device is capable of monitoring temperature with an accuracy of ?1 percent of the temperature being monitored in ?C or ?0.5 ?C, whichever is greater, and the temperature sensor is installed at a location in the exhaust vent stream from the condenser exit (i.e., product side). 7. Carbon adsorption system. Records that show any of the following: a. The monitoring device is equipped with a continuous recorder that measures the concentration level of the organic compounds in the exhaust vent stream from the carbon bed. b. The monitoring device is equipped with a continuous recorder that measures a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.		665.1064(5)

Section T: Air Emission Standards BB

N. BB: Recordkeeping

T.148: The generator records in the facility operating record the following monitoring, operating and inspection information: 1. The flow indicator provides a record of vent stream flow from each affected process vent to the control device at least once every hour. 2. For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. 3. For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. 4. For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame. 5. For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. 6. For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter or parameters that indicates good combustion operating practices are being used. 7. For a condenser, any of the following: a. monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser. b. temperature monitoring device equipped with a continuous recorder. 8. For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly in the control device, any of the following: a. monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed. b. A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.		665.1064(5)

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N. BB: Recordkeeping

T.149: The generator records in the facility operating record the date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as follows: 1. For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 seconds at a minimum temperature of 760 ?C, period when the combustion temperature is below 760 ?C. 2. For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 percent or greater, period when the combustion zone temperature is more than 28 ?C below the design average combustion zone temperature established (s. NR 665.1035(2)(d)3.a.). 3. For a catalytic vapor incinerator, period when any of the following occurs: a. Temperature of the vent stream at the catalyst bed inlet is more than 28 ?C below the average temperature of the inlet vent stream established (s. NR 665.1035(2)(d)3.b.). b. Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established (s. NR 665.1035(2)(d)3.b.). 5. For a boiler or process heater, period when any of the following occurs: a. Flame zone temperature is more than 28 ?C below the design average flame zone temperature established (s. NR 665.1035(2)(d)3.c.). b. Position changes where the vent stream is introduced to the combustion zone from the location established (s. NR 665.1035(2)(d)3.c.). 5. For a flare, period when the pilot flame is not ignited. 6. For a condenser that complies with s. NR 665.1033 (6) (b) 6. a., period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established (s. NR 665.1035(2)(d)3.e.). 7. For a condenser that complies with s. NR 665.1033(6)(b)6.b., period when any of the following occurs: a. Temperature of the exhaust vent stream from the condenser is more than 6 ?C above the design average exhaust vent stream temperature established (s. NR 665.1035(2)(d)3.e.). b. Temperature of the coolant fluid exiting the condenser is more than 6 ?C above the design average coolant fluid temperature at the condenser outlet established (s. NR 665.1035(2)(d)3.e.). 8. For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with s. NR 665.1033(6)(b)7.a., period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established (s. NR 665.1035(2)(d)3.f.). 9. For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with s. NR 665.1033(6)(b)7.b., period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established (s. NR 665.1035(2)(d)3.f.).		665.1064(5)
T.150: The generator records in the facility operating record an explanation for each period recorded under T.138 of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.		665.1064(5)
T.151: The generator records in the facility operating record for carbon adsorption systems that regenerates the carbon bed directly on-site in the control device (s. NR 665.1033(7)) the date when existing carbon in the control device is replaced with fresh carbon.		665.1064(5)
T.152: The generator records in the facility operating record for carbon adsorption systems that replace the carbon bed at predetermined time interval that is less than the design carbon replacement interval (s. NR 665.1033((8)(b)), the date when existing carbon in the control device is replaced with fresh carbon.		665.1064(5)

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N. BB: Recordkeeping

T.153: The generator records in the facility operating record for carbon adsorption systems operated when breakthrough is indicated (s. NR 665.1033(8)(a)), a log that records all of the following: a. Date and time when control device is monitored for carbon breakthrough and the monitoring device reading. b. Date when existing carbon in the control device is replaced with fresh carbon.		665.1064(5)
T.154: The generator records in the facility operating record the date of each control device startup and shutdown.		665.1064(5)
T.155: For a control device (other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser or carbon adsorption system) the generator recorded in the facility operating record, monitoring and inspection information indicating proper operation and maintenance of the control device.		665.1064(6)
T.156: The generator records all of the following information in a log that is kept in the facility operating record for all equipment subject to ss. NR 665.1052 to 665.1060: 1. A list of identification numbers for equipment (except welded fittings) subject to subchapter BB. 2. A list of identification numbers for pumps (s. NR 665.1052(5)), compressors (s. 665.1053(9)), and valves (s. 665.1057(6)) that the generator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. 3. The designation of the equipment listed in item 2 is signed by the generator. 4. A list of equipment identification numbers for pressure relief devices in gas or vapor service with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. 5. The dates of each compliance test (initially upon designation, annually, and at other times requested by the department) for pumps (s. NR 665.1052(5)(c)), compressors (s. 665.1053(9)(b)), and valves (s. 665.1057(6)(c)). 6. The background level measured during each compliance test for the equipment listed in item 5. 7. The maximum instrument reading measured at the equipment listed in item 5 during each compliance test. 8. A list of identification numbers for equipment in vacuum service. 9. Identification, either by list or location (area or group) of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year.		665.1064(7)
T.157: The generator records all of the following information in a log that is kept in the facility operating record for valves in gas or vapor service or in light liquid service that are designated as unsafe-to-monitor (s. NR 665.1057(7)) or difficult-to-monitor (s. NR 665.1057(8)): (a) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor and the plan for monitoring each valve. (b) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor and the planned schedule for monitoring each valve.		665.1064(8)
T.158: The generator records all of the following information in the facility operating record for complying with the alternative standards (skip period leak detection and repairs) for valves in gas or vapor service or in light liquid service (s. NR 665.1062): (a) A schedule of monitoring. (b) The percent of valves found leaking during each monitoring period.		665.1064(9)

LARGE QUANTITY GENERATOR INSPECTION: BB AIR EMISSION STANDARDS

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N. BB: Recordkeeping

T.159: The generator records all of the following information in a log that is kept in the facility operating record: 1. For pumps in light liquid service the criteria that indicates failure of the seal system, the barrier fluid system, or both and an explanation of the criteria (s. NR 665.1052(4)(e)2.). 2 For compressor the criteria that indicates failure of the seal system, the barrier fluid system, or both and an explanation of the criteria (s. NR 665.1053(5)(b)). 2. Any changes to these criteria and the reasons for the changes.		665.1064(10)
T.160: The generator retains records of the equipment leak information required by s. NR 665.1064(4) (see item T.144) and the operating information required by s. NR 665.1064(5) (see item T.145) for at least 3 years.		665.1064(12)

Section U: Air Emission Standards CC

H. CC: Closed-vent systems and control devices

T.258: For nonassisted flares that are designed and operated with an exit velocity <122 m/s (400 ft/s) the heat value of the vent stream >= 7.45 MJ/scm (200 Btu/scf).		665.1033(4)(d)3.

Section Z: Generator Status Evaluation

N. BB: Recordkeeping

T.142: The generator's documentation of their closed-vent systems and/or control devices consist of all of the following documentation (s. NR 665.1035(2)(d).		665.1064(2)(d)